

Weekly Report

2016.11.21-2016.11.27

1.This Week

Security Project

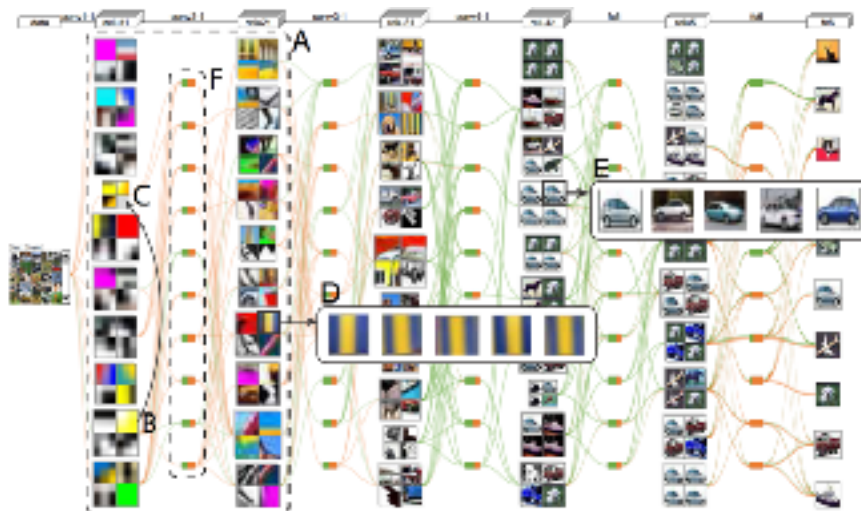
- 1.Have a discussion with Yao and our group members. Figure out what we need to improve about our system.
- 2.Do some coding job of the system, including revise coding logic and improve interactions (requirement 6,7,8 in the meeting report).
- 3.Read blogs about security and keep looking for valuable research topics through our project. (Actually at first I'm quite lost in how to find a valuable research topic and this week I talked to Xia Jing about my confusion. She actually give me some valuable advice and encourages me to talk to relevant people frequently. After talking to her I start to have a feeling that I need to push myself harder.)

Others

- 1.Make plans for the Hangzhou travel of Professor Eduard Groeller. Temporarily, my plan includes the West lake and Song Chen, and I'm preparing for the sight introduction.

Paper Reading

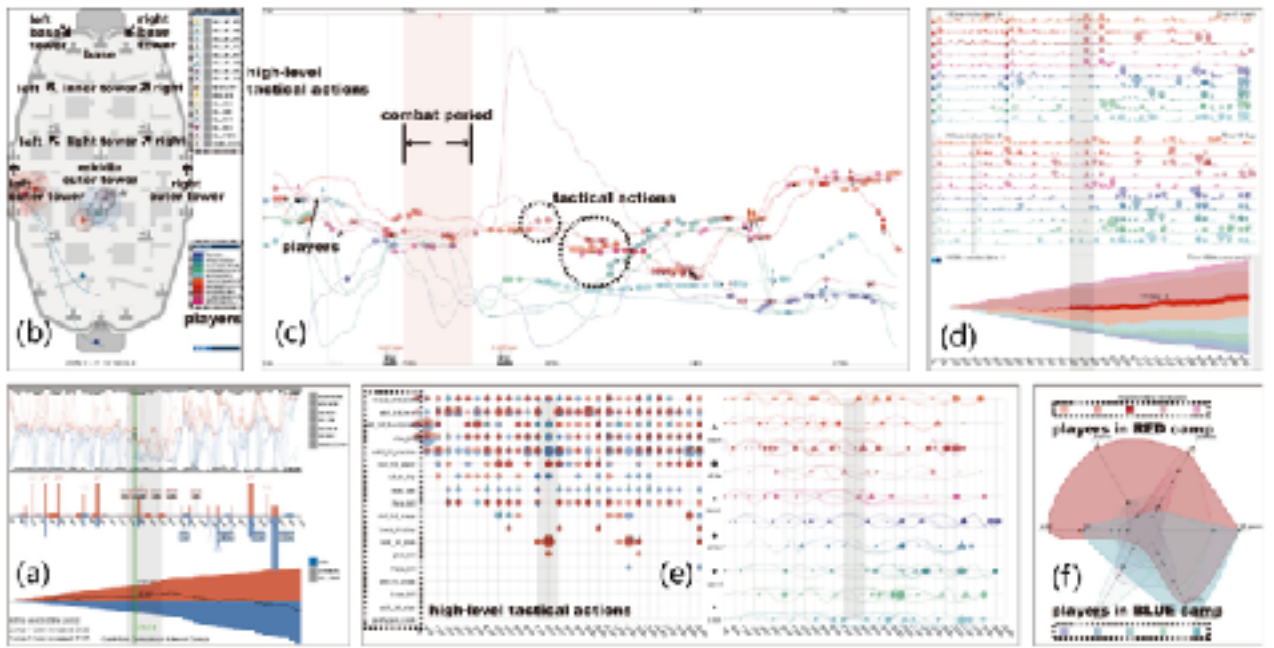
1.Towards Better Analysis of Deep Convolutional Neural Networks



This paper presents a visual analytics system to help machine learning experts understand, diagnose, and refine CNNs. The system design includes a hybrid visualization consisting of

rectangle packing, matrix ordering, and biclustering-based edge bundling (reference to a last year vast paper). Analysts can explore and understand a deep CNN from different perspectives and diagnose and refine the CNN architecture to further improve performance.

2.A Visual Analytics Approach for Understanding Reasons behind Snowballing and Comeback in MOBA Games



This paper presents a visual analytics system to enable the analysis of occurrences in a MOBA game, including snowballing and comeback behavior. Their system consolidates the multi-variate gameplay data into insights of trends, game replay and players' tactics. The figure above depicts a match with *comeback* occurrence. (a) Trend View. (b) Trajectory Vie. (c) Tactic Geographical Timeline View. (d) Resource Time Sequence View. (e) Tactic Comparison View (Left) and Equipment Evolution View (Right). (f) Player Billing Radar View.

3.TextTile: An Interactive Visualization Tool for Seamless Exploratory Analysis of Structured Data and Unstructured Text



This paper presents a visualization tool for exploration of structured data and unstructured text. This work is actually invoked by real world tasks, including review of medical comments and UNOCHA data analysis which constructs the two main case studies of this paper. The main method includes three steps:

- 1.filter: allows the user to filter the data according to user-specified conditions over one or more of the data fields outlined above.
- 2.split: allows the user to split the data into multiple subsets according to the values found in one user-selected field or according to keywords provided by the user.
- 3.summarize: allows the user to decide which field to use to summarize the data segments generated by the filter and split operations.

To Do

- 1.Learn about the basic back end coding techniques and tools, especially back end coding part of the security project and trying to understand the whole coding from the back end to the front.
2. Keep up with the security project, including searching for research topics and do coding jobs when necessary.
- 3.Write seminar course thesis and prepare for seminar course presentation.